	Application No.	Applicant(s)
Interview Summary	10/718,299	ARNDT ET AL.
	Examiner	Art Unit
	RAMY M. OSMAN	2157

All participants (applicant, applicant's representative, PTO personnel):

(1) *RAMY M. OSMAN*.　　　　　　　　　(3)_____.

(2) *Peter Manzo (54700)*.　　　　　　　　(4)_____.

　Date of Interview: *27 November 2007*.

　Type:　a)☒ Telephonic　b)☐ Video Conference
　　　　c)☐ Personal [copy given to: 1)☐ applicant　2)☐ applicant's representative]

Exhibit shown or demonstration conducted:　d)☐ Yes　e)☒ No.
　　If Yes, brief description: _____.

Claim(s) discussed: *1 and 8*.

Identification of prior art discussed: *Kashyap et al (US Pat 7116673)*.

Agreement with respect to the claims f)☒ was reached.　g)☐ was not reached.　h)☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: *Discussed proposed amendments. Examiner agreed that the proposed amendment would overcome Kashyap, but would not necessarily place the application in condition for allowance. Also discussed 112 second paragraph rejection of claim 8 and how to overcome that rejection.*.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.	Examiner's signature, if required

DETAILED ACTION

Status of Claims

1.   This action is responsive to amendment filed on December 5, 2007, where Applicant

amended claims 1,8,9,16,17,24. Claims 1-24 are pending.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-24 have been considered and are

persuasive. However, the arguments are moot in view of the new ground(s) of rejections

presented below.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

4.   Claims 9-16 rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter. The claims recite "computer readable medium". Paragraph 90 of

Applicants disclosure states that "computer readable medium" includes "transmission-type

media" which includes, among other things, RF and wave transmissions. Therefore, it is clear

that the scope of the claimed "computer readable medium" is intended to cover transmission

media which includes signals.   This does not fall within any of the statutory categories and is

therefore not patentable subject matter. **See MPEP Chapter 2106 Section IV.B.¶4 and**

Chapter 2106.01

5.   Claims 17-24 rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter. The claims recite a "data processing system". Paragraph 65 of

Applicants disclosure mentions that firmware/software can be used to implement the invention.

Therefore, it is possible that the claims are directed to a program per se. Claiming a program is

non statutory because it is not a process occurring as a result of executing the stored program. It

is also not a machine programmed to operate in accordance with the stored program, nor is it a

manufacture structurally and functionally interconnected with the stored program in a manner

which enables the program to act as a computer component and realize its functionality. It is

also clearly not a composition of matter and therefore does not fall within any of the statutory

categories. **See MPEP Chapter 2106.01 Section I.**

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

7.   Claims 1,9,17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention. Claim 1, for example, on line 7 recites "checking a multicast table ... to determine

if a matching entry exists". However, this limitation is incomplete because it is unclear what

exactly are the elements being compared that would allow a determination of a match to be

made.

Claim Rejections - 35 USC § 102

8.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

9.   **Claims 1-7,9-15,17-23 rejected under 35 U.S.C. 102(b) as being anticipated by**

Infiniband Trade Association (Infiniband Architecture Specification Volume 1, 11/6/2002).

10.   In reference to claim 1, Infiniband teaches a method in a logically partitioned data

processing system, the method comprising:

receiving a packet in a host channel adapter for a system area network (pg 108 lines 16-

25), wherein the host channel adapter is shared among a plurality of logical partitions within the

logically partitioned data processing system, and wherein each logical partition within the

plurality of logical partitions includes a logical host channel adapter having a logical port (pg

474 lines 18-42 and pgs 903-904);

checking a multicast table in the host channel adapter to determine if a matching entry

exists, wherein the multicast table contains information on multicast groups to which logical

ports of logical host channel adapters belong (pg 476 line 31 – pg 477 line 15 and pg 908); and

forwarding the packet to trusted software in response to a determination that the packet is

intended for multicasting and that no matching entry exists in the multicast table, wherein the

trusted software forwards the packet to one or more appropriate recipient logical partitions

within the plurality of logical partitions (pg 417 line 19 – pg 418 line 37).

11.   In reference to claim 2, Infiniband teaches the method of claim 1, wherein at least one

protocol checking operation of the host channel adapter is bypassed for the purpose of

forwarding the packet to the trusted software (pg 416).

12.   In reference to claim 3, Infiniband teaches the method of claim 2, wherein the trusted

software completes the at least one protocol checking operation on the forwarded packet (pg 106

lines 11-18).

13.   In reference to claim 4, Infiniband teaches the method of claim 3, wherein the at least one

protocol checking operation includes at least one of queue key (Q_key) checking and partition

key (P_key) checking (pg 94 lines 9-35).

14.   In reference to claim 5, Infiniband teaches the method of claim 1, wherein the trusted

software includes at least one of a hypervisor and an operating system (pg 106 lines 11-18).

15.   In reference to claim 6, Infiniband teaches the method of claim 1, wherein the packet is

received by the host channel adapter from a system area network fabric (pg 107 lines 5-14).

16.   In reference to claim 7, Infiniband teaches the method of claim 1, wherein the packet is

received by the host channel adapter from an application on a host associated with the host

channel adapter and the packet is received by the host channel adapter for the purpose of

transmitting the packet over the system area network (pg 906).

17.   In reference to claims 9-15, these are computer program product claims that correspond

to the method claims of claims 1-7. Therefore, claims 9-15 are rejected based upon the same

rationale as given for claims 1-7 above.

18.   In reference to claims 17-23, these are claims that correspond to the method claims of

claims 1-7. Therefore, claims 17-23 are rejected based upon the same rationale as given for

claims 1-7 above.

Allowable Subject Matter

19.   Claims 8,16,24 objected to as being dependent upon a rejected base claim, but would be

allowable if rewritten in independent form including all of the limitations of the base claim and

any intervening claims.

20.   The following is a statement of reasons for the indication of allowable subject matter:

Prior art references found to be pertinent to Applicants disclosure (such as Patent Publication

Numbers: 20030236900   and   20020198927), either only teach minor aspects of the

invention or only teach the general environment of the invention. The collective prior art, either

singly or in combination, do not teach the claim limitations. The particular novel feature of

Applicants invention is (as stated in the claims), wherein in response to the host channel

adapter's receiving the packet and in response to an associated Force Out bit in a work queue

element being set to a first value, the host channel adapter attempts to transmit the packet to local

logical host channel adapters, and in response to the channel adapter's receiving the packet and in

response to the associated Force Out bit in the work queue element being set to a second value

that is distinct from the first value, the host channel adapter transmits the packet over a system

area network fabric.

Conclusion

21.   The above rejections are based upon the broadest reasonable interpretation of the claims.
Applicant is advised that the specified citations of the relied upon prior art, in the above
rejections, are only representative of the teachings of the prior art, and that any other supportive
sections within the entirety of the reference (including any figures, incorporation by references,
claims and/or priority documents) is implied as being applied to teach the scope of the claims.

22.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. See attached Form 892.

23.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to RAMY M. OSMAN whose telephone number is (571)272-4008.

The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RMO
February 16, 2008